A. REMARKS

No amendments to the present application have been made in this reply. Hence, Claims 1-90 are pending in this application. Claims 71-76 were previously withdrawn from consideration in view of the election for examination of Claims 1-70 and 77-90, but remain pending in the application. All issues raised in the Office Action mailed April 14, 2006 are addressed hereinafter.

REJECTION OF CLAIMS 1-70 AND 77-90 UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Claims 1-70 and 77-90 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The stated basis for the rejection is that "[i]t is unclear how the claimed limitation of 'in response to detecting that the second more recent version of the data is available, and requesting the second more recent version of the data be supplied to the cache' is performed independent of any request for that data." This rejection with the same stated basis were included in the Final Office Action mailed on September 29, 2005 and was fully addressed in the Appeal Brief filed on January 23, 2006. Prosecution was subsequently re-opened with the Office Action mailed on April 21, 2006 based upon a new art-based rejection and there is no indication in that Office Action whether the comments in the Appeal Brief addressing the rejection of Claims 1-70 and 77-90 under 35 U.S.C. § 112, second paragraph, were considered. Therefore, for purposes of furthering the prosecution of this application, those remarks are reproduced hereinafter for consideration by the Examiner.

It is certainly true that conventional caching mechanisms, such as those described in the *Keesey* reference, rely upon prior requests for data to determine whether a more recent version of data is available. Unlike prior conventional approaches however, the approaches recited in Claims 1-70 and 77-90 detect that an updated version of data is available independent of any request for the data. This may be done using numerous approaches and the inventions recited in Claims 1-70 and 77-90 are not limited to any particular approaches. As one example, a notification may be received from a source of data, such as an origin server, that a new version of data has been received, independent of any request for the data. Specification at Page 13, lines 7-14. This may be used for new data that has never been previously requested or stored in a

cache. Specification at Page 21, lines 11-15. This is only one example of how a second more recent version of data may be detected independent of any request for that data and the claimed invention is not limited to this example or any particular approach.

In view of the foregoing, it is respectfully submitted that Claims 1-70 and 77-90 are not indefinite for failing to particularly point out and distinctly claim the subject matter, which Applicant regards as the invention. Accordingly, reconsideration and withdrawal of the rejection of Claims 1-70 and 77-90 under 35 U.S.C. § 112, second paragraph, is respectfully requested.

REJECTION OF CLAIMS 1-70 AND 77-90 UNDER 35 U.S.C. § 103(a)

Claims 1-70 and 77-90 were rejected under 35 U.S.C. § 103(a) as being anticipated by *Keesey et al.*, U.S. Patent No. 6,622,167 (hereinafter "*Keesey*") in view of *Zimowski*, U.S. Patent No. 6,832,368. It is respectfully submitted that Claims 1-70 and 77-90 are patentable over *Keesey* and *Zimowski* for at least the reasons provided hereinafter.

CLAIM 1

Claim 1 is directed to a method for managing data stored in a cache that recites:

"providing a first version of data in response to receiving a first request for data;
detecting, independent of any request for the data, that a second more recent version of the data is available;
in response to detecting, independent of any request for the data, that the second more recent version of the data is available,
requesting the second more recent version of the data be supplied to the cache, and
storing in the cache the second more recent version of the data;
receiving a second request for the data; and
in response to receiving the second request for the data,
retrieving the second more recent version of the data from the cache, and
providing the second more recent version of the data."

It is respectfully submitted that Claim 1 is patentable over *Keesey* and *Zimowski*, considered alone or in combination, because a *prima facie* case of obviousness has not been established. The bases for this assertion are: 1) that there is no suggestion or motivation to combine the teachings of *Keesey* and *Zimowski* in the manner set forth in the Office Action; and

2) that the proposed combination changes a principle of operation of the prior art invention being modified. Each of these issues is discussed separately hereinafter.

1. No Suggestion or Motivation to Combine the Teachings of *Keesey* and *Zimowski*

It is respectfully submitted that there is no suggestion or motivation to combine the teachings of *Keesey* and *Zimowski* in the manner set forth in the Office Action. The suggestion or motivation to combine references must exist either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. MPEP § 2143 There mere fact that references can be combined does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 16 USPQ 2d 1430 (Fed. Cir. 1990).

With respect to the combination of *Keesey* and *Zimowski*, it is respectfully submitted that there is no teaching or suggestion in *Keesey* of modifying the Intranet System 20 to update data contained in the caches of the DSSs independent of any request for data stored in the caches. In both the passive and active modes of operation, a DSS determines whether a new version of a document is available only after the DSS requests and receives a document from an upstream DSS or the Internet. After receiving a document from an upstream DSS or the Internet, the DSS then determines whether the received document is a revised version of an existing document stored in the local cache of the DSS. *Keesey* is devoid of any teaching or suggestion of incorporating any type of mechanism similar to that described in *Zimowski*, wherein modifications to data are dynamically detected and the data in the cache updated, independent of requests for the data. In *Keesey*, updates to data are made exclusively in the context of requests.

With respect to *Zimowski*, the approach is described exclusively in the context of fixed caching of a pre-processed version of an interpreted application. There is no teaching or suggestion in *Zimowski* of processing requests for a pre-processed version of an interpreted application stored in cache 114 and in response to those requests, providing a copy of the pre-processed version of the interpreted application to a requestor. Thus, there is no teaching or suggestion in *Zimowski* of applying the caching approach to the caching context described in *Keesey*. It is therefore respectfully submitted that the *Keesey* and *Zimowski* references do not teach or suggest combining the references in the manner set forth in the Office Action.

In addition to there not being a suggestion or motivation in the references themselves to combine the references as set forth in the Office Action, it is also respectfully submitted that a suggestion or motivation to combine references also does not exist in the knowledge generally available to one of ordinary skill in the art. One of ordinary skill in the art would readily appreciate the various objectives set forth in *Keesey* related to reducing network traffic congestion and reducing the amount of data stored in caches. These objectives are met, at least in part, by only storing in caches copies of data that have been requested by a user or a DSS. Furthermore, *Keesey* also describes maintaining copies of data based upon usage frequency to further reduce the amount of storage resources that are consumed. This includes maintaining copies of data that is frequently requested and not maintaining copies of data that is not frequently requested. See, e.g., Col. 3, lines 30-50; Col. 5, lines 16-27; Col. 6, lines 28-41, *et al.* One skilled in the art would readily appreciate that implementing an approach as described in *Zimowski*, where modified versions of data are automatically detected and loaded into a cache, irrespective of requests for the data, would be directly at odds with objectives set forth in *Keesey*. Thus, one of ordinary skill in the art would not be motivated to combine the references as set forth in the Office Action given the knowledge generally available to one of ordinary skill in the art.

In view of the foregoing, it is respectfully submitted that there is no suggestion or motivation to combine the teachings of *Keesey* and *Zimowski* in the manner set forth in the Office Action in either the references themselves or in the knowledge generally available to one of ordinary skill in the art.

2. The Proposed Combination Changes a Principle of Operation of the Prior Art Invention

It is also respectfully submitted that the proposed combination changes a principle of operation of the prior art invention being modified. Specifically, modifying the system of *Keesey* with the approach of *Zimowski*, where modified versions of data are automatically detected and loaded into a cache, irrespective of requests for the data, would completely change the principle of operation of processing responses to inquiries at DSSs based upon usage frequency. Such a modification would destroy the *Keesey* reference. For example, the text at Col. 6, lines 5-63 of *Keesey* describes how when a response to an inquiry is received at a DSS,

that data contained in the response is only stored in the cache of a DSS if the data has been requested at least a threshold number of times. If not, then the data contained in the response is not stored in the cache. Using the approach of *Zimowski*, new versions of data would be automatically detected and loaded into the caches of DSSs. This would completely circumvent the storing of data based upon usage frequency and would therefore change one of the principles of operation of *Keesey*.

In view of the foregoing, it is respectfully submitted that Claim 1 is patentable over *Keesey* and *Zimowski* because a *prima facie* case of obviousness has not been established for at least two reasons, namely, that there is no suggestion or motivation to combine the teachings of *Keesey* and *Zimowski* in the manner set forth in the Office Action and that the proposed combination changes a principle of operation of the prior art invention being modified.

CLAIMS 2-12

Claims 2-12 all depend from Claim 1 and include all of the limitations of Claim 1. It is therefore respectfully submitted that Claims 2-12 are patentable over *Keesey* and *Zimowski* for at least the reasons set forth herein with respect to Claim 1. Furthermore, it is respectfully submitted that Claims 2-12 recite additional limitations that independently render them patentable over *Keesey* and *Zimowski*.

CLAIMS 13-24

Claims 13-24 recite limitations similar to Claims 1-12, except in the context of computer-readable media. It is therefore respectfully submitted that Claims 13-24 are patentable over *Keesey* and *Zimowski* for at least the reasons set forth herein with respect to Claims 1-12.

CLAIMS 25-36

Claim 25 recites "detecting, independent of any request for the data, that a second more recent version of the data is available" and "in response to detecting, independent of any request for the data, that the second more recent version of the data is available, ... and requesting the second more recent version of the data be supplied to the cache." These limitations are recited in Claim 1. It is therefore respectfully submitted that Claim 25 is patentable over *Keesey* and *Zimowski* for at least the reasons set forth herein with respect to Claim 1. Claims 26-36 depend

from Claim 25 and include all of the limitations of Claim 25. It is therefore respectfully submitted that Claims 26-36 are also patentable over *Keesey* and *Zimowski*.

CLAIMS 37-48

Claims 37-48 recite limitations similar to Claims 25-36, except in the context of computer-readable media. It is therefore respectfully submitted that Claims 37-48 are patentable over *Keesey* and *Zimowski* for at least the reasons set forth herein with respect to Claims 25-36.

CLAIMS 49-58

Claim 49 recites limitations similar to Claim 1. For example, Claim 49 recites "determining, for each of the one or more data items, independent of any request for any of the one or more data items, whether a newer version of the data item is available" and "for each of the one or more data items where a determination is made, independent of any request for any of the one or more data items, that a newer version of the data item is available, ... requesting the newer version of the data item be supplied to the cache." It is therefore respectfully submitted that Claim 49 is patentable over *Keesey* and *Zimowski* for at least the reasons set forth herein with respect to Claim 1. Claims 50-58 all depend from Claim 49 and include all of the limitations of Claim 49. It is therefore respectfully submitted that Claims 50-58 are also patentable over *Keesey* and *Zimowski*.

CLAIMS 59-68

Claims 59-68 recite limitations similar to Claims 49-58, except in the context of computer-readable media. It is therefore respectfully submitted that Claims 59-68 are patentable over *Keesey* and *Zimowski* for at least the reasons set forth herein with respect to Claims 49-58.

CLAIMS 69 AND 70

Claim 69 recite limitations similar to Claim 1. For example, Claim 69 recites "detecting, independent of any request for data, that new data that is not stored in the cache is available" and "in response to detecting, independent of any request for data, that the new data is available, requesting that the new data be supplied to the cache." It is therefore respectfully submitted that Claim 69 is patentable over *Keesey* and *Zimowski* for at least the reasons set forth herein with respect to Claim 1. Claim 70 recites limitations similar to Claim 69, except in the context of a

computer-readable medium. It is therefore respectfully submitted that Claim 70 is also patentable over *Keesey* and *Zimowski*.

CLAIMS 77 AND 78

Claim 77 recites limitations similar to Claim 1. For example, Claim 77 recites "detecting, independent of any request for the content, that a second more recent version of the content is available on the origin server" and "in response to detecting, independent of any request for the content, that the second more recent version of the content is available on the origin server,... requesting and receiving the second more recent version of the content from the origin server." It is therefore respectfully submitted that Claim 77 is patentable over *Keesey* and *Zimowski* for at least the reasons set forth herein with respect to Claim 1. Claim 78 recites limitations similar to Claim 77, except in the context of a computer-readable medium. It is therefore respectfully submitted that Claim 78 is also patentable over *Keesey* and *Zimowski*.

CLAIMS 79-89

Claim 79 recites limitations similar to Claim 1. For example, Claim 79 recites "detect, independent of any request for content, that a second more recent version of the content is available" and "in response to detecting, independent of any request for the content, that the second more recent version of the content is available on the origin server, request the second more recent version of the content be supplied to the cache." It is therefore respectfully submitted that Claim 79 is patentable over *Keesey* and *Zimowski* for at least the reasons set forth herein with respect to Claim 1. Claims 80-89 all depend from Claim 79 and include all of the limitations of Claim 79. It is therefore respectfully submitted that Claims 80-89 are also patentable over *Keesey* and *Zimowski*.

CLAIM 90

Claim 90 recites limitations similar to Claim 1. For example, Claim 90 recites "detect, independent of any requests for data stored in the cache, that a second more recent version of the data is available" and "in response to detecting, independent of any requests for data stored in the cache, that the second more recent version of the data is available, ..., and requesting the second more recent version of the data be supplied to the cache." It is therefore respectfully submitted

that Claim 90 is patentable over *Keesey* and *Zimowski* for at least the reasons set forth herein with respect to Claim 1.

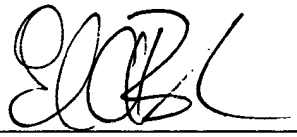
CONCLUSION

It is respectfully submitted that all of the pending claims are in condition for allowance and the issuance of a notice of allowance is respectfully requested. If there are any charges, please charge them to Deposit Account No. 50-1302.

The Examiner is invited to contact the undersigned by telephone if the Examiner believes that such contact would be helpful in furthering the prosecution of this application.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP



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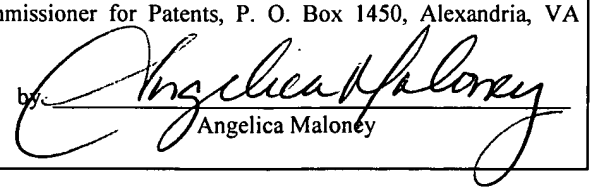
on July 20, 2006 by: 
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